	Application No.	Applicant(s)
Notice of Allowability	09/520,008	CHOI ET AL.
	Examiner	Art Unit
	Mary J. Steelman	2122
	Mary 0. Occurran	2122
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatio (GHTS). This application is subject	oplication. If not included n will be mailed in due course. THIS
1. \boxtimes This communication is responsive to <u>05/28/2004</u> .		
2. ⊠ The allowed claim(s) is/are <u>1-71</u> .		
3. A The drawings filed on 6/20/2000,1/30/2004 are accepted by	y the Examiner.	
 4. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 		
2. Certified copies of the priority documents have	been received in Application No	
3. Copies of the certified copies of the priority doc	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
 A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 		
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO	-948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the	Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the		
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I 	sit of BIOLOGICAL MATERIAL FOR THE DEPOSIT OF BIOLOGIC	must be submitted. Note the CAL MATERIAL.
Attachment(s)	E Nation of Information	Potent Application (DTO 450)
 Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) 		Patent Application (PTO-152)
2. Notice of Draitperson's Patent Drawing Review (P10-946)	6. ☐ Interview Summary Paper No./Mail Da	
 Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 	_	
4. Examiner's Comment Regarding Requirement for Deposit		ent of Reasons for Allowance
of Biological Material	9.	
	Homeeji	n Centry bycy cours
	V	NY NGUYEN-BA
	7/4/0	ARACIA ELECTOR

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04)

Notice of Allowability

PRIMARY EXAMINEDER No./Mail Date 25200

Application/Control Number: 09/520,008

Art Unit: 2122

DETAILED ACTION

1. Per Applicant's request, in Amendment dated 5/28/2004, claims 1, 7, 25, 29, 33, 34, 36, 37, 41, 43, 52, 54, and 64-66 have been amended. Claims 70 and 71 have been added. Claims 1-71 are pending.

Allowable Subject Matter

2. Claims 1-71 are allowed.

Examiner's Statement of Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The prior art of record, Choi, et al., "Deterministic Replay of Java Multithreaded Applications", W. Richard Stevens, "TCP/IP Illustrated, Volume 1, The Protocols", and Patrick Chan, "The JAVA Developers Almanac, The JAVA Series from the Source", taken alone or in combination fail to teach such limitations in the independent claims 1, 60, 61, and 64-69 as follows:

As Applicant has noted in Amendment, page 21, 6th paragraph, "neither Choi/Srinivasan Article, nor the Stevens book, nor any combination thereof teaches or suggests a method for recording and replaying execution of distributed p programs on a computer system in s distributed environment, "wherein said deterministically replaying comprises recording events of a plurality of virtual machines, each virtual machine being assigned a unique virtual machine identity during a record phase".

All remaining claims, dependent claims 2-59, 62, 63, 70 and 71, are thus allowed

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Application/Control Number: 09/520,008

Art Unit: 2122

Page 3

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

After October 25, 2004, examiner can be reached at new telephone number (571) 272-3704. Supervisor, Tuan Q. Dam can be reached at (571) 272-3694.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

09/02/2004

Hoangun Centony hourseu Brandon Mouseu Brandon Mouven-BA